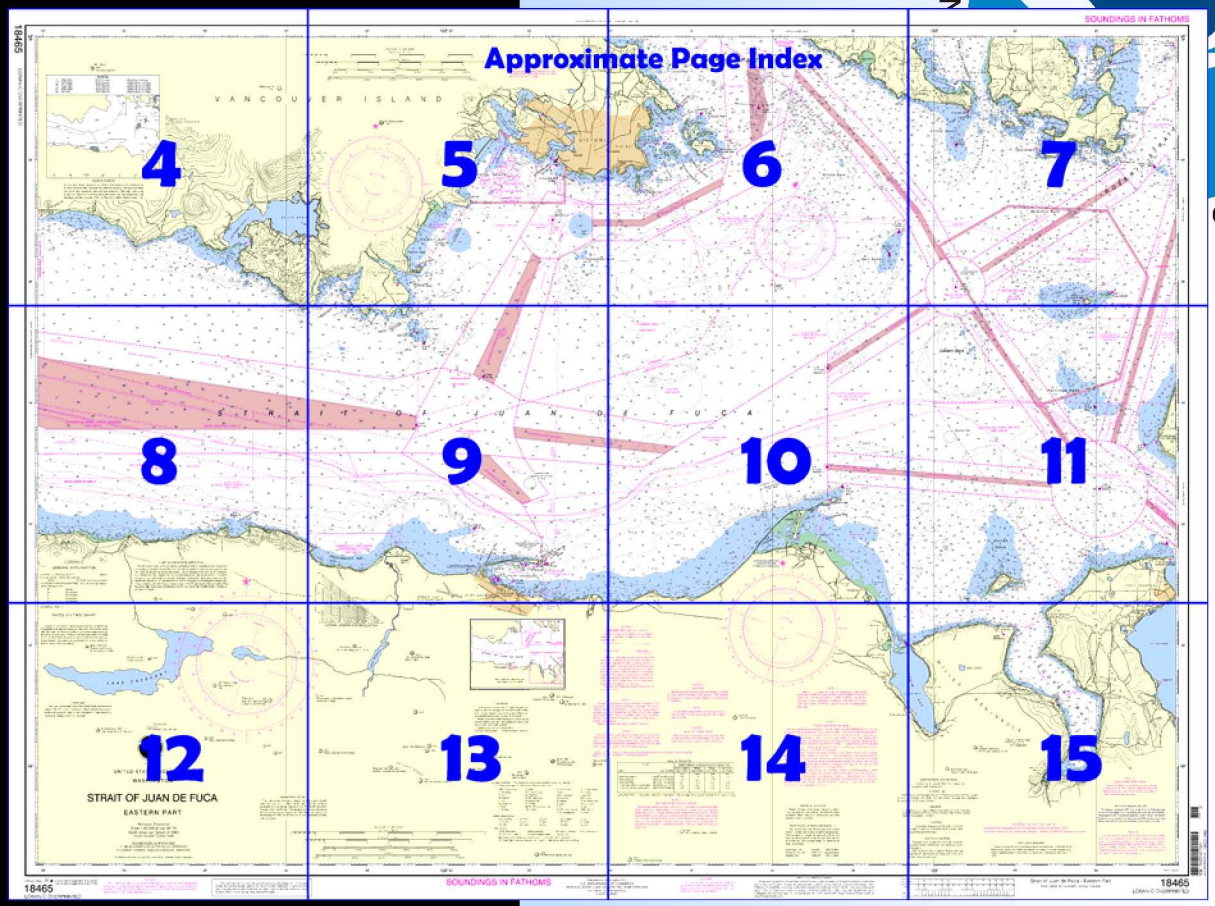
BookletChart™

Strait of Juan de Fuca – Eastern Part

(NOAA Chart 18465)

A reduced scale NOAA nautical chart for small boaters. When possible, use the full size NOAA chart for navigation.

- ☑ *Complete, reduced scale nautical chart*
- ☑ *Print at home for free*
- ☑ *Convenient size*
- ☑ *Up to date with all Notices to Mariners*
- ☑ *United States Coast Pilot excerpts*
- ☑ *Compiled by NOAA, the nation's chartmaker.*



NOAA — National Oceanic and Atmospheric Administration — Commerce

Home Edition (not for sale)

Published by the
National Oceanic and Atmospheric Administration
National Ocean Service
Office of Coast Survey
www.NauticalCharts.NOAA.gov
301-713-2770

What are Nautical Charts?

Nautical charts are a fundamental tool of marine navigation. They show water depths, obstructions, buoys, other aids to navigation, and much more. The information is shown in a way that promotes safe and efficient navigation. Chart carriage is mandatory on the commercial ships that carry America's commerce. They are also used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters.

What is a BookletChart™?

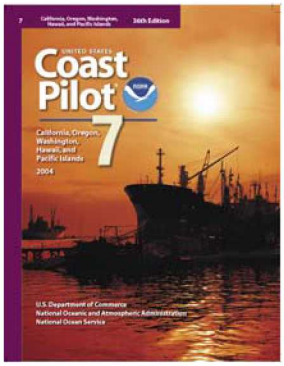
This BookletChart is made to help recreational boaters locate themselves on the water. It has been reduced in scale for convenience, but otherwise contains all the information of the full-scale nautical chart. The bar scales have also been reduced, and are accurate when used to measure distances in this BookletChart. See the Note at the bottom of page 5 for the reduction in scale applied to this chart.

Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at http://www.NauticalCharts.NOAA.gov.

This BookletChart does NOT fulfill chart carriage requirements for regulated commercial vessels under Titles 33 and 44 of the Code of Federal Regulations.

Notice to Mariners Correction Status

This BookletChart has been updated for chart corrections published in the U.S. Coast Guard Local Notice to Mariners, the National Geospatial Intelligence Agency Weekly Notice to Mariners, and, where applicable, the Canadian Coast Guard Notice to Mariners. Additional chart corrections have been made by NOAA in advance of their publication in a Notice to Mariners. The last Notices to Mariners applied to this chart are listed in the Note at the bottom of page 7. Coast Pilot excerpts are not being corrected.



[Coast Pilot 7, Chapter 12 excerpts]

(98) **Sheringham Point** is marked by a light.Victoria marine radio station VAK is at Sheringham Point.

(100) **Beechey Head,** 11.5 miles ESE of Sheringham Point, is bold, wooded, and steep-to. Vessels bound up the strait and passing outside Race Rocks should give Beechey Head a berth of 2 miles.

(101) **Race Rocks,** 5 miles E of Beechey Head, are a cluster of bare low rocks from 0.5 mile to almost 1.5 miles from shore.

(106) **Bentinck Island,** 1 mile NW of Race Rocks Light, is fringed with kelp on its S and E sides. **Pedder Bay, Parry Bay,** and **Royal Roads,** separated by William Head and **Albert Head,** form the coast between Bentinck Island and the W entrance to Esquimalt Harbor.

(109) **William Head** is a comparatively low promontory extending about 0.5 mile NE of **Ned Point.** It is marked by a light and fog signal. Close W of William Head is **Quarantine Cove,** on the E shore of which are the conspicuous red brick buildings of the former quarantine station, now used as a penitentiary.

(111) **Constance Bank,** 6.8 miles E of William Head Light, has general depths of 8 to 13 fathoms.

(112) **Albert Head,** 3.3 miles NE of William Head, is marked by a light.

(113) **Esquimalt Harbor,** about 3 miles NNE of Albert Head, affords safe and ample anchorage and can be entered at any time.

(114) **Victoria Harbor,** landlocked and well protected, is about 2 miles ESE of Esquimalt Harbor, and can accommodate large vessels.

(116) **Brotchie Ledge,** the only outlying danger, about 200 yards long within the 5-fathom curve, lies 0.6 mile S of Ogden Point.

(117) **Clover Point,** 2 miles ESE of the entrance to Victoria Harbor, is low, bare of trees, and steep-to.

(118) **Trial Islands,** 4 miles E of Victoria Harbor, are bare and rocky; from most directions the two islands appear as one.

(119) **Discovery Island,** 2 miles ENE of **Gonzales Point,** lies off the junction of Haro Strait and the Strait of Juan de Fuca.

(120) **Hein Bank**, with a least depth of 2¼ fathoms, lies 8.5 miles SE of Discovery Island; it is about 2 miles long in a N direction, within the 10-fathom curve, and 0.8 mile wide.

(121) **Smith Island,** 5 miles W of Whidbey Island and 8 miles ESE of Hein Bank, is irregular in shape and about 0.5 mile long.

(123) **Minor Island,** small, low, and rocky, lies 1 mile NE of Smith Island, and at lowest tide is connected with it by a gravel and boulder spit. A light is on the island.

(148) Shoal water makes out a considerable distance from **Low Point** (48°09.6'N., 123°49.5'W.), 5 miles E of Twin Rivers, and vessels should not approach this point closer than 0.8 mile.

(149) **Agate Bay,** 3.5 miles E of Low Point, is clear and deep; 10 fathoms can be carried to within 0.2 mile of the shore.

(150) **Crescent Bay,** 4.2 miles E of Low Point, is a small semicircular bight 1 mile in diameter.

A reef extends about 400 yards NW from **Tongue Point,** the E entrance point of Crescent Bay.

(151) **Observatory Point** is 3 miles E of Tongue Point.

(152) **Freshwater Bay,** about 4 miles E of Crescent Bay, is a broad open bight, affording anchorage in 6 to 10 fathoms.

(153) **Angeles Point,** on the E side of Freshwater Bay, is low, sandy, and covered with alders. The **Elwha River** empties into the strait at this point.

(157) **Port Angeles**, 6.5 miles E of Freshwater Bay and 56 miles from Cape Flattery, is entered between **Ediz Hook,** a low and narrow sandspit 3 miles long, and the main shore to the S.

(163) **Ediz Hook Light** (48°08'25"N., 123°24'08"W.), 60 feet above the water, is shown from a skeleton tower, 0.3 mile W of the E extremity of Ediz Hook.

(164) **Port Angeles** is on the S shore of the harbor.

(185) From Port Angeles the coast trends E for 13 miles to the end of **Dungeness Spit,** which borders the W side of **Dungeness Bay.**

(190) **Dungeness** is a small town on the S shore of the bay. The ruins of a former wharf extend about 1,000 yards out across the flats.

(192) **Protection Island,** a prominent feature in approaching Discovery Bay, is 200 feet high near its W extremity, 1.5 miles long and sparsely wooded; its N shore consists of bare, light bluffs. The E end and S shore are clear of dangers, but off **Kanem Point,** its SW end, a shoal extends SW for over 0.2 mile, and depths of 5 fathoms and less are found 0.5 mile W of the point. This shoal is marked by a buoy. **Dallas Bank** extends N from Protection Island; the 10-fathom curve lies about 2.5 miles from the N point. N of the 10-fathom curve the bank drops off abruptly to depths of over 20 fathoms. **Miller Peninsula,** about 6 miles long and 3 to 5 miles wide, separates Sequim Bay and Discovery Bay.

Table of Selected Chart Notes

Corrected through NM May 17/08
Corrected through LNM May 13/08

CABLE AND PIPELINE AREAS

The cable and pipeline areas falling within the areas of the large scale Canadian charts are not shown on this chart.

NOTE C

For Canadian Firing Practice and Exercise Areas see Canadian Notice to Mariners No. 35 on each annual edition.

SUPPLEMENTAL INFORMATION

Consult U.S. Coast Pilot 7 for important supplemental information.

CAUTION

Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.

AIDS TO NAVIGATION

Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation.

See Canadian List of Lights, Buoys and Fog Signals for information not included in the U.S. Coast Guard Light List.

NOAA WEATHER RADIO BROADCASTS

The NOAA Weather Radio stations listed below provide continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Neah Bay, WA	KIH-36	162.55 MHz
Puget Sound, WA	WWG-24	162.425 MHz
Seattle, WA	KHB-60	162.55 MHz

CAUTION

Limitations on the use of radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light Lists and National Geospatial-Intelligence Agency Publication 117.

Radio direction-finder bearings to commercial broadcasting stations are subject to error and should be used with caution.

Station positions are shown thus:
⊙(Accurate location) o(Approximate location)

HORIZONTAL DATUM

The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected an average of 0.685" southward and 4.724" westward to agree with this chart.

WARNING

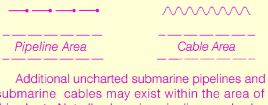
The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot for details.

RADAR REFLECTORS

Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

CAUTION
SUBMARINE PIPELINES AND CABLES

Charted submarine pipelines and submarine cables and submarine pipeline and cable areas are shown as:



Additional uncharted submarine pipelines and submarine cables may exist within the area of this chart. Not all submarine pipelines and submarine cables are required to be buried, and those that were originally buried may have become exposed. Mariners should use extreme caution when operating vessels in depths of water comparable to their draft in areas where pipelines and cables may exist, and when anchoring, dragging, or trawling.

Covered wells may be marked by lighted or unlighted buoys.

NOTE E
SMALL ARMS SAFETY ZONE

Naval Air Station small arms range operates 7 days a week. Red flashing light and flags are displayed during live fire exercises. Use caution when transitting near the zone.

NOTE D
NAVAL OPERATING AREAS

Mariners should use caution as naval craft may be maneuvering within the areas. For further information, consult Local Notices to Mariners.

NOTE H

A Cooperative Vessel Traffic Services (CVTS) system has been established by the United States and Canada within the adjoining waters in the Juan de Fuca Region. The appropriate Vessel Traffic Center (VTC) (Tofino Traffic, Seattle Traffic, Victoria Traffic) administers the rules issued by both nations, however, it will enforce only its own set of rules within its jurisdiction.

NOTE G

The U.S. Coast Guard operates a mandatory Vessel Traffic Services (VTS) system in the U.S. waters covered by this chart. Vessel operating procedures and designated radio-telephone frequencies are published in 33 CFR 161, the U.S. Coast Pilot, and/or the VTS User's Manual.

HEIGHTS

Heights in feet above Mean High Water in U. S. Territory. Heights expressed in feet above Higher High Water, Larger Tides in Canadian Territory.

NOTE J

Mariners are cautioned that the Washington State and/or local government Ferries may deviate from the published standard routes due to inclement weather, traffic conditions, navigational hazards, or other emergency conditions. Standard ferry routes within the waters of the San Juan Islands are not displayed on this chart.

NATIONAL WILDLIFE REFUGE

The areas labeled NWR (National Wildlife Refuge) are closed to the public to protect breeding colonies of seabirds, endangered and threatened species, and marine mammals. Boaters are requested to stay at least 200 yards away from these islands to avoid disturbance to these animals.

NOTE A

Navigation regulations are published in Chapter 2, U.S. Coast Pilot 7. Additions or revisions to Chapter 2 are published in the Notice to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 13th Coast Guard District in Seattle, Washington or at the Office of the District Engineer, Corps of Engineers in Seattle, Washington.

Refer to charted regulation section numbers.

Mercator Projection
Scale 1:80,000 at Lat 48° 13'
North American Datum of 1983
(World Geodetic System 1984)

SOUNDINGS IN FATHOMS
AT MEAN LOWER LOW WATER IN U.S. TERRITORY
AT LOWEST NORMAL TIDES IN CANADIAN TERRITORY

LORAN-C
GENERAL EXPLANATION

LORAN-C FREQUENCY.....100kHz
PULSE REPETITION INTERVAL
5990.....59,900 Microseconds
STATION TYPE DESIGNATORS: (Not individual station letter designators).
M..... Master
W..... Secondary
X..... Secondary
Y..... Secondary
Z..... Secondary

EXAMPLE: 5990-Y

RATES ON THIS CHART

Loran-C correction tables published by the National Geospatial-Intelligence Agency or others should not be used with this chart. The lines of position shown have been adjusted based on survey data. Every effort has been made to meet the ¼ nautical mile accuracy criteria established by the U.S. Coast Guard. Mariners are cautioned not to rely solely on the lattices in inshore waters.

Additional information can be obtained at nauticalcharts.noaa.gov.

POLLUTION REPORTS

Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

AUTHORITIES

Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the Corps of Engineers, Canadian Surveys and U.S. Coast Guard.

SOURCE DIAGRAM

The outlined areas represent the limits of the most recent hydrographic survey information that has been evaluated for charting. Surveys have been banded in this diagram by date and type of survey. Channels maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, United States Coast Pilot.

PUGET SOUND HARBOR SAFETY PLAN

The US Coast Guard and the Puget Sound Harbor Safety Committee have developed and adopted a Harbor Safety Plan that formally established a set of Standards of Care for Puget Sound and surrounding waters. These Standards of Care are intended to supplement existing regulations by documenting good marine practices for a variety of operations including tug escorts, pilotage, anchoring, lightering, and provides additional information on required charts, Aids to Navigation and Emergency Response. If your vessel does not already have a copy of the Puget Sound Harbor Safety Plan, log on to http://www.marineexchangesea.com or contact the Seattle Marine Exchange at (206) 443-3830.

CAUTION

This chart has been corrected from the Notice to Mariners (NM) published weekly by the National Geospatial-Intelligence Agency and the Local Notice to Mariners (LNM) issued periodically by each U.S. Coast Guard district to the dates shown in the lower left hand corner. Chart updates corrected from Notice to Mariners published after the dates shown in the lower left hand corner are available at nauticalcharts.noaa.gov.

NOTE F
TRAFFIC SEPARATION SCHEME

One-way traffic lanes overprinted on this chart are RECOMMENDED for use by all vessels traveling between the points involved. They have been designated to aid in the prevention of collisions in the Strait of Juan de Fuca waters, but are not intended in any way to supersede or alter the applicable Rules of the Road. Separation zones are intended to separate inbound and outbound traffic and to be free of ship traffic. Separation Zones should not be used for crossing purposes. When crossing traffic lanes and separation zones, use extreme caution.

Precautionary Areas have been established where major lanes merge and cross the traffic separation scheme. It is recommended that vessels proceed with caution in these areas. Wherever practical, vessels entering or leaving the system should do so at these precautionary areas. For more information regarding Traffic Separation Scheme procedures and regulations, see 33 CFR 167 and/or Chapter 2 of the U.S. Coast Pilot.

For information governing the VESSEL TRAFFIC MANAGEMENT AND INFORMATION SYSTEM for the coastal waters of southern British Columbia, see National Geospatial-Intelligence Agency Publication 154, Sailing Directions (enroute) for British Columbia, and the Sailing Directions British Columbia Coast (South Portion) Volume 1, published by the Canadian Hydrographic Service.

COLREGS, 80.1385 (see note A)
International Regulations for Preventing Collisions at Sea, 1972.
The entire area of this chart falls seaward of the COLREGS Demarcation Line.

4A 13 Vessel Traffic Services calling-in point with numbers; arrow indicates direction of vessel movement.

This nautical chart has been designed to promote safe navigation. The National Ocean Service encourages users to submit corrections, additions, or comments for improving this chart to the Chief, Marine Chart Division (N/CS2), National Ocean Service, NOAA, Silver Spring, Maryland 20910-3282.

TIDAL INFORMATION

PLACE NAME	(LAT/LONG)	Height referred to datum of soundings (MLLW) Mean Higher High Water	Mean High Water	Mean Low Water
		feet	feet	feet
Port Townsend	(48°07'N/122°45'W)	8.5	7.8	2.5
Port Angeles	(48°07'N/123°26'W)	7.1	6.5	1.9
Crescent Bay	(48°10'N/123°44'W)	6.7	6.1	2.0
* Victoria, Vancouver Island	(48°26'N/123°23'W)	8.6	8.0	4.6
* Sooke, Vancouver Island	(48°22'N/123°44'W)	9.4	8.4	4.8

Dashes (- - -) located in datum columns indicate unavailable datum values for a tide station. Real-time water levels, tide predictions, and tidal current predictions are available on the Internet from http://tidesandcurrents.noaa.gov.

(Jan 2008) *Note - In Canadian waters the chart datum is the average of the Lowest Normal Tides, approximately.

ABBREVIATIONS (For complete list of Symbols and Abbreviations, see Chart No. 1.)

Aids to Navigation (lights are white unless otherwise indicated):

AERO aeronautical	G green	Mo morse code	R TR radio tower
Al alternating	IQ interrupted quick	N nun	Rot rotating
B black	Iso isophase	OBSC obscured	s seconds
Bn beacon	LT HO lighthouse	Oc occulting	SEC sector
C can	M nautical mile	Or orange	St M statute miles
DIA diaphone	m minutes	Q quick	VQ very quick
F fixed	MICRO TR microwave tower	R red	W white
Fl flashing	Mkr marker	Ra Ref radar reflector	WHIS whistle
		R Bn radiobeacon	Y yellow

Bottom characteristics:

Blds boulders	Co coral	gy gray	Oys oysters	so soft
bk broken	G gravel	h hard	Rk rock	Sh shells
Cy clay	Grs grass	M mud	S sand	sy sticky

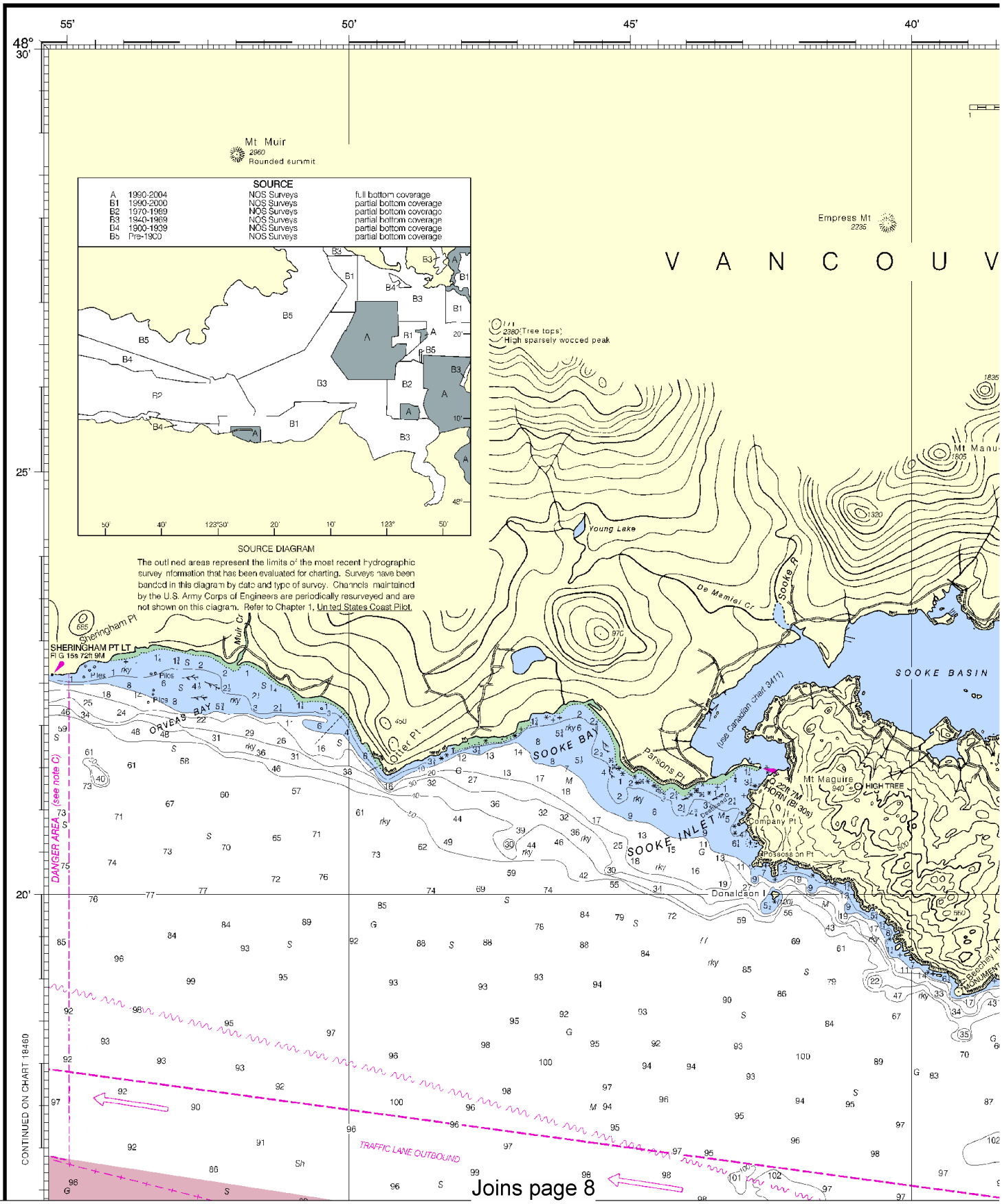
Miscellaneous:

AUTH authorized	Obstn obstruction	PD position doubtful	Subm submerged
ED existence doubtful	PA position approximate	Rep reported	

(21) Wreck, rock, obstruction, or shoal swept clear to the depth indicated.
(2) Rocks that cover and uncover, with heights in feet above datum of soundings.

PRINT-ON-DEMAND CHARTS

NOAA and its partner, OceanGrafix, offer this chart updated weekly by NOAA for Notices to Mariners and critical corrections. Charts are printed when ordered using Print-on-Demand technology. New Editions are available 5-8 weeks before their release as traditional NOAA charts. Ask your chart agent about Print-on-Demand charts or contact NOAA at 1-800-584-4683, http://NauticalCharts.gov, help@NauticalCharts.gov, or OceanGrafix at 1-877-56CHART, http://OceanGrafix.com, or help@OceanGrafix.com.



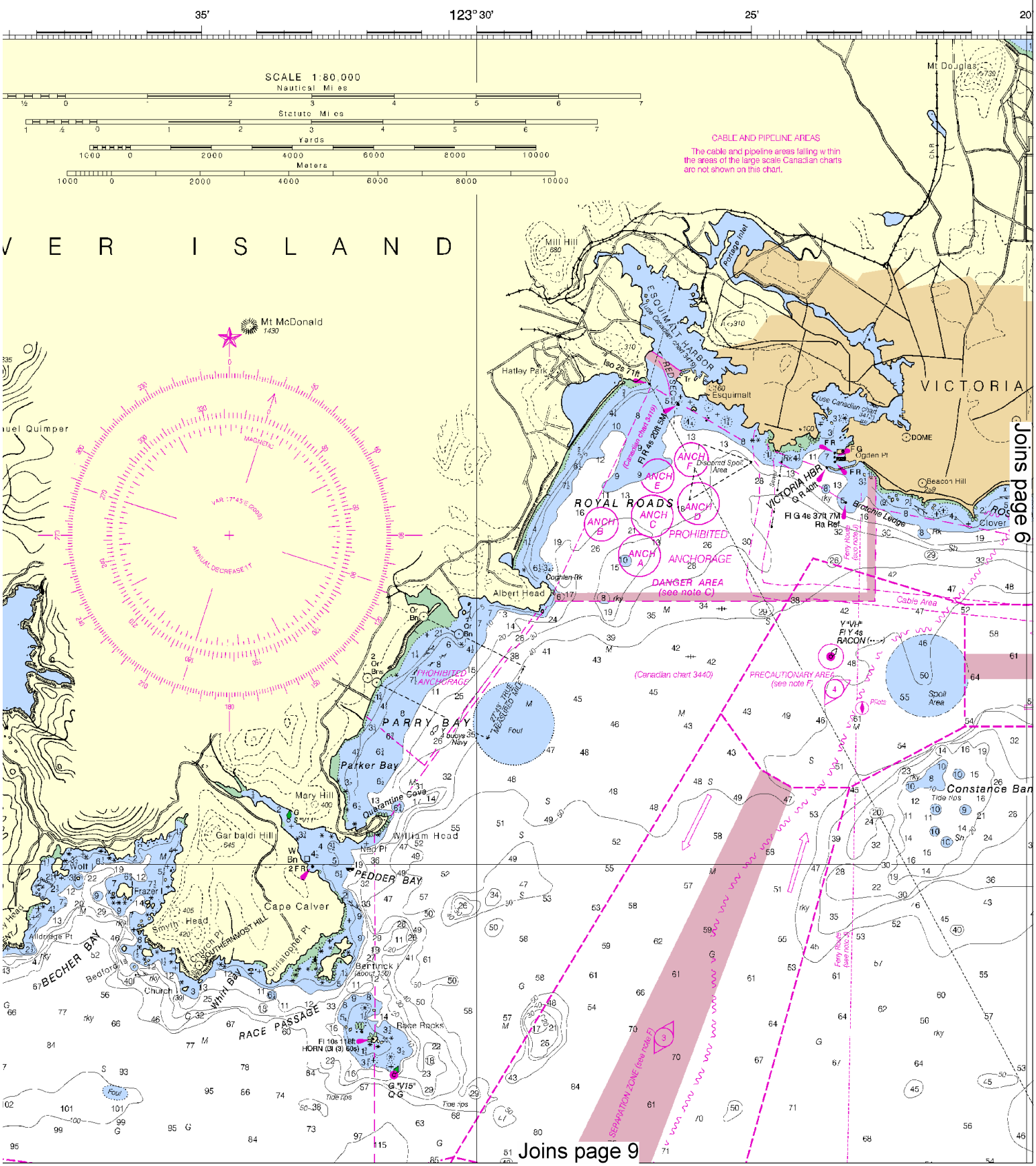
North

Printed at reduced scale. ~~SCALE 1:80,000~~ See Note on page 5.

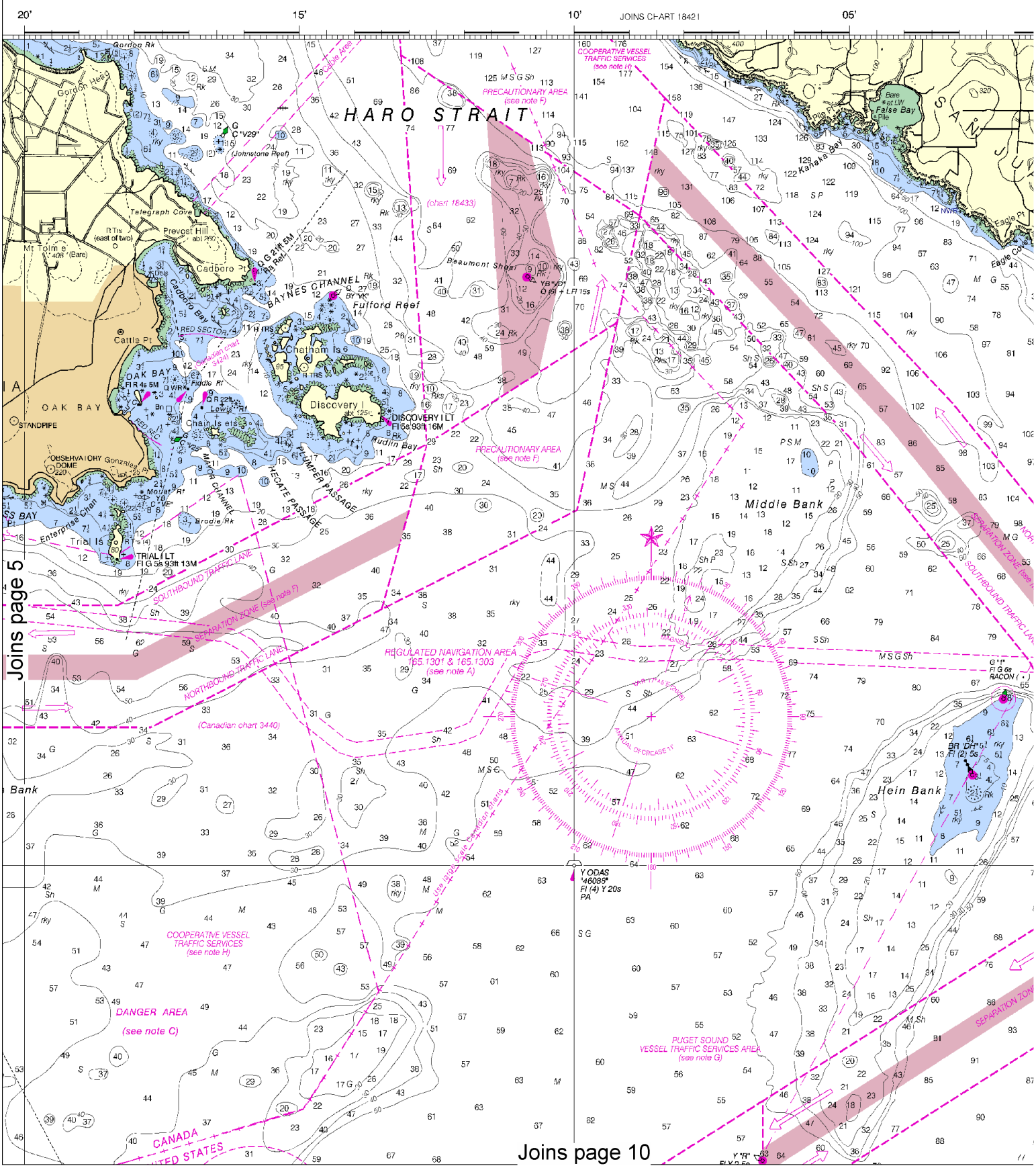
Nautical Miles: 1 0 1 2 3 4 5 6 7

Yards: 1000 0 2000 4000 6000 8000 10000

Formerly C&GS 6382, 1st Ed., Oct. 1927



This BookletChart was reduced to 70% of the original chart scale. The new scale is 1:114286. Barscales have also been reduced and are accurate when used to measure distances in this BookletChart.



6

North

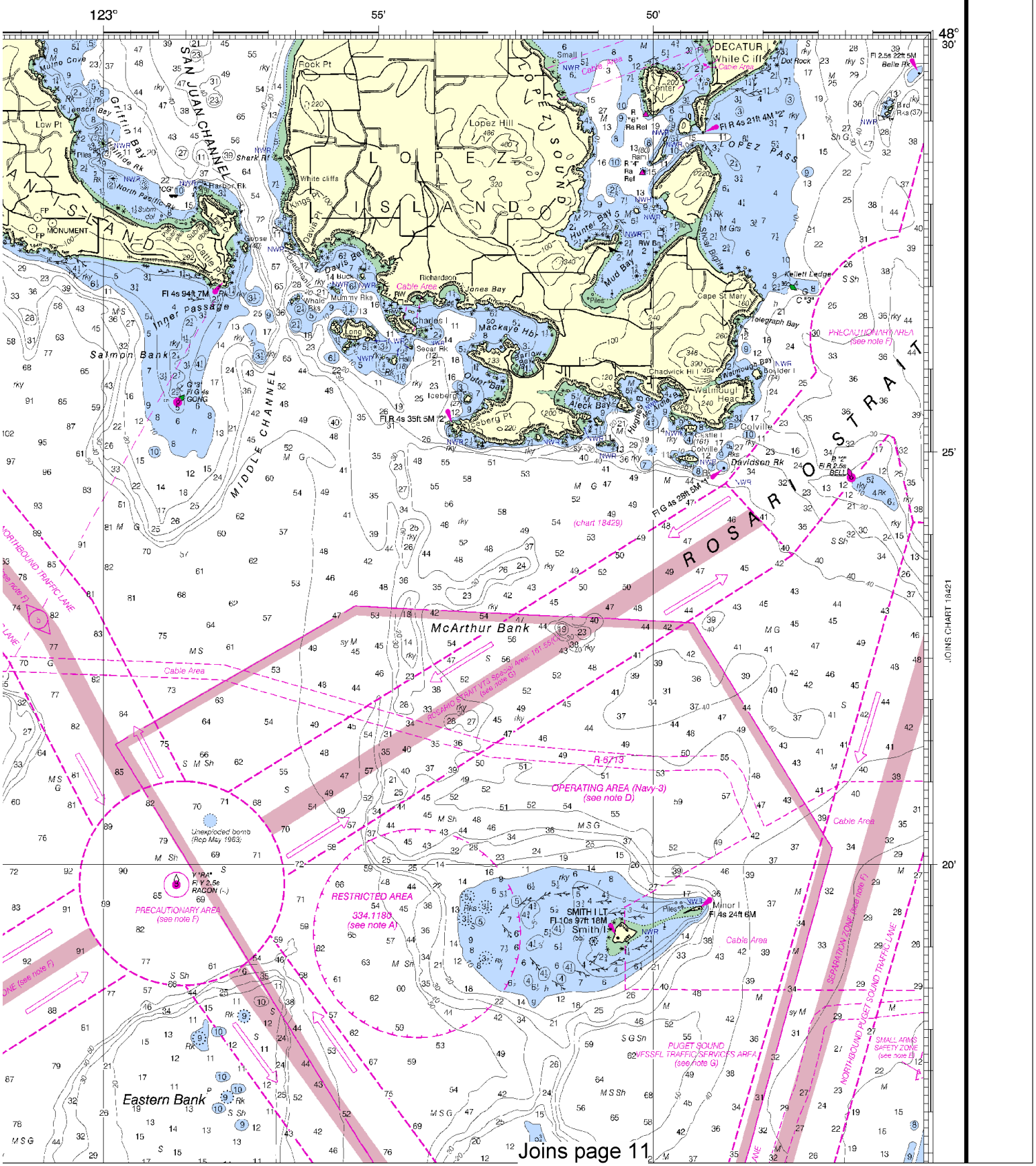
Printed at reduced scale. ~~SCALE 1:80,000~~

Nautical Miles: 1 0 1 2 3 4 5 6 7

Yards: 1000 0 2000 4000 6000 8000 10000

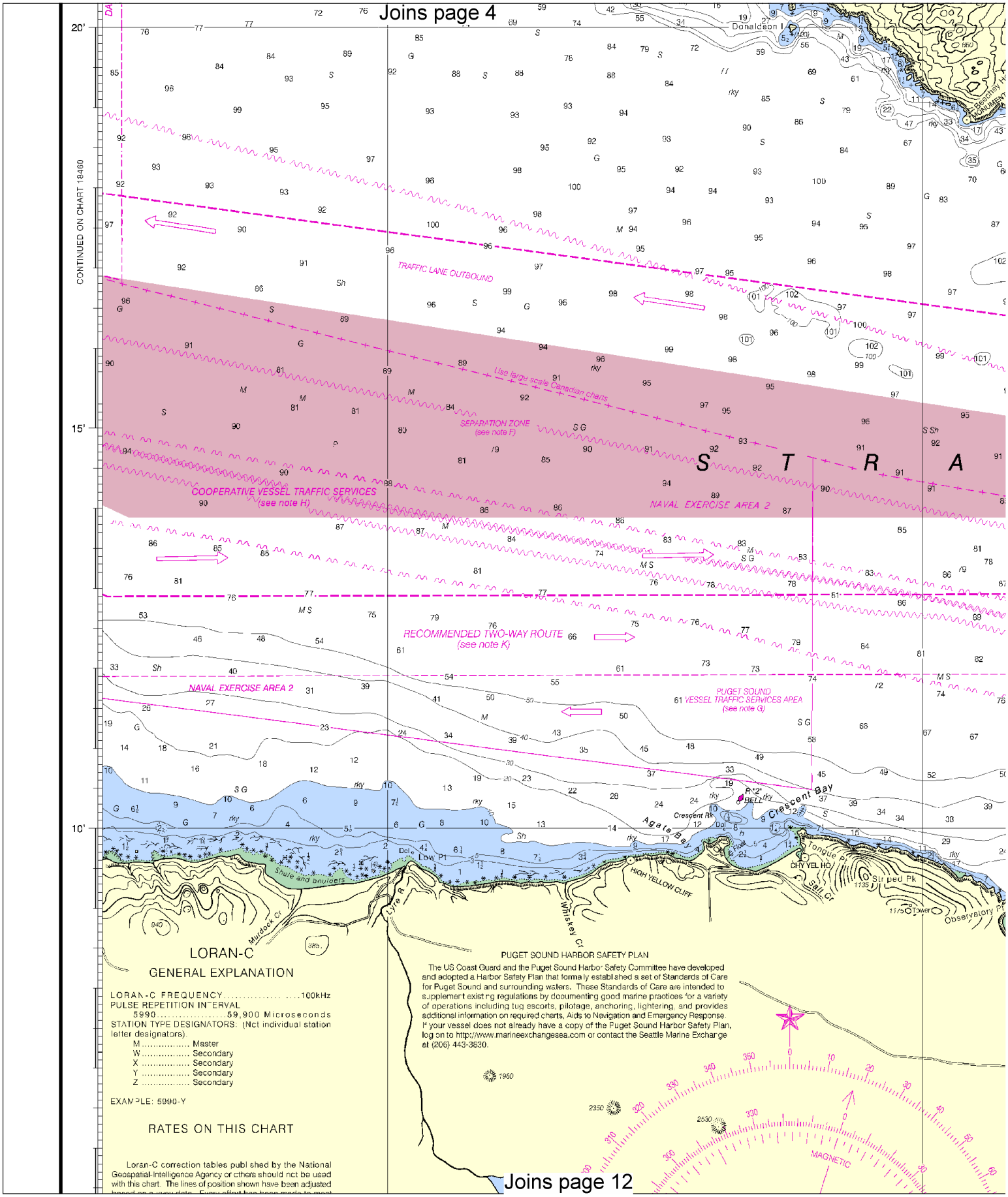
See Note on page 5.

SOUNDINGS IN FATHOMS



Joins page 11

This BookletChart has been updated with: Coast Guard Local Notice To Mariners: 0710 2/16/2010,
NGA Weekly Notice to Mariners: 0910 2/27/2010,
Canadian Coast Guard Notice to Mariners: n/a .

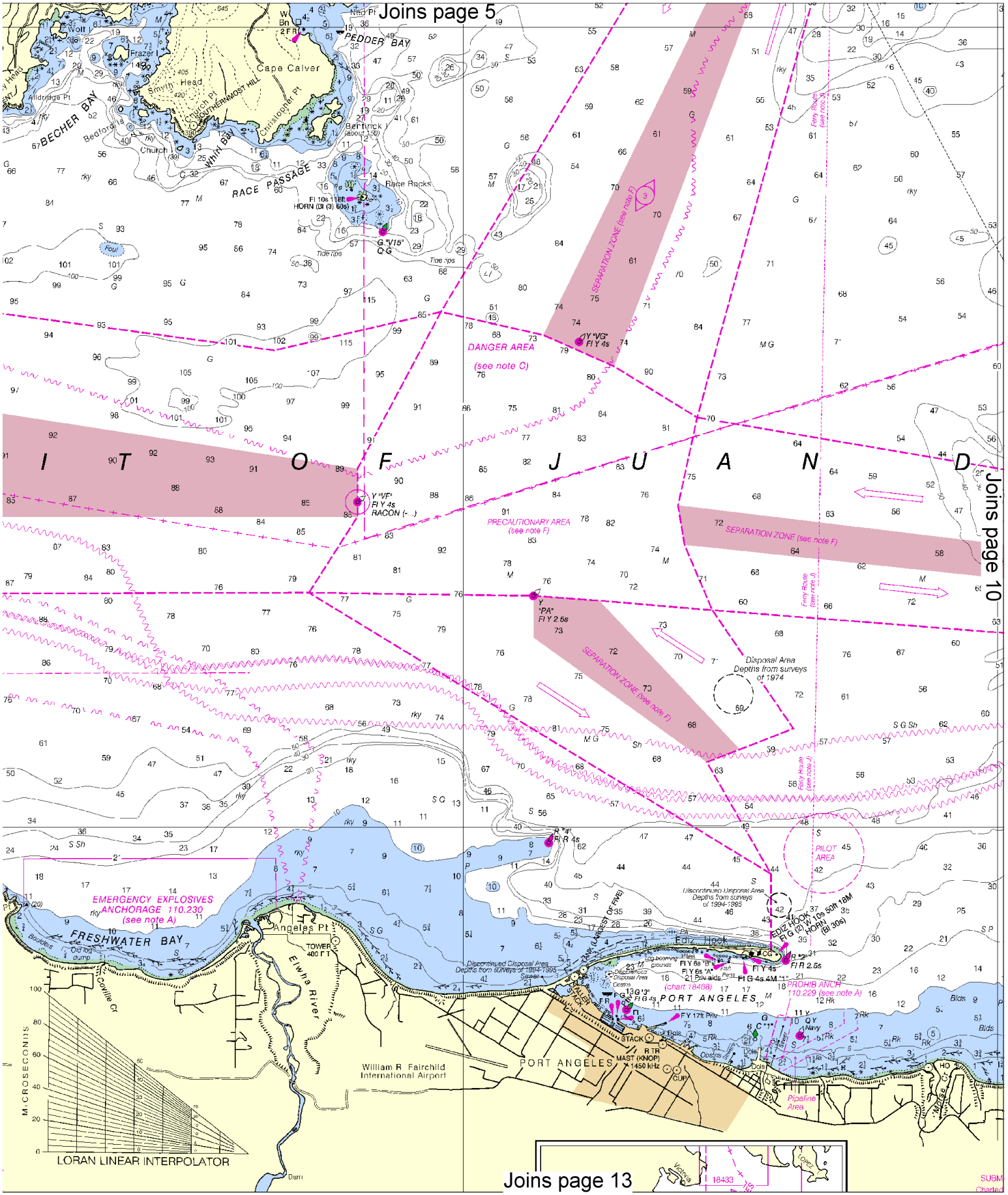


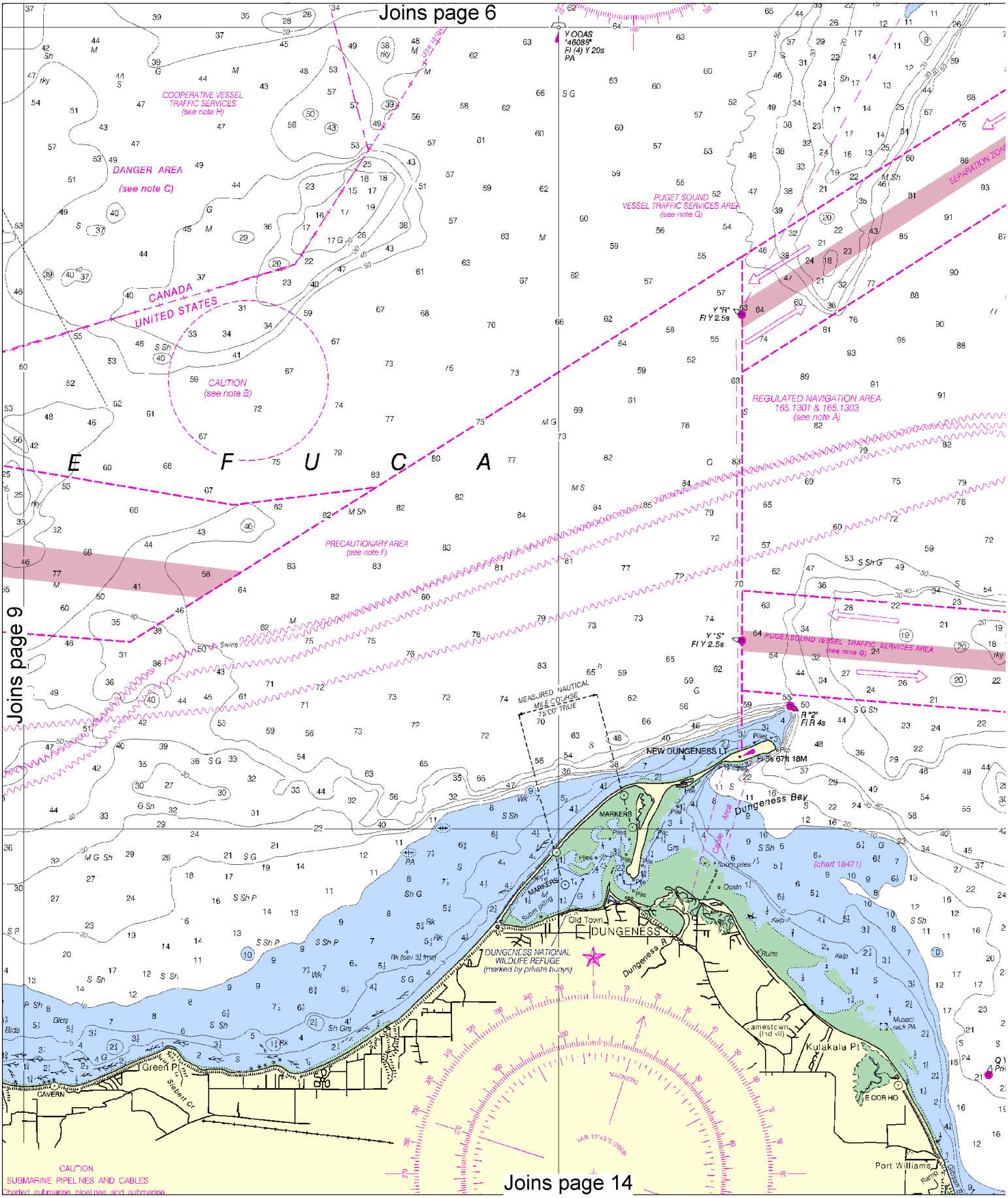
North

Printed at reduced scale. ~~SCALE 1:80,000~~ See Note on page 5.

Nautical Miles

Yards


Joins page 5
Joins page 10
Joins page 13
PEDDER BAY
Cape Calver
Smyth Head
Church Pt
SOUTHERMMOST HILL
Christopher Pt
Bentinck I
(about 150)
BECHER BAY
Beaford
Church
Four
NINA BAY
RACE PASSAGE
Race Rocks
Fl 10s 118ft
HORN (3) 60s
"15"
Q G
Tide rips
DANGER AREA
(see note C)
Y "VG"
Fl Y 4s
SEPARATION ZONE (see note F)
Ferry Routes (see note J)
I T O F J U A N D
Y "VF"
Fl Y 4s
RACON (- ..)
PRECAUTIONARY AREA
(see note F)
Y
"PA"
Fl Y 2.5s
Disposal Area
Depths from surveys
of 1974
Ferry Route (see note J)
PILOT AREA
EMERGENCY EXPLOSIVES
ANCHORAGE 110.230
(see note A)
FRESHWATER BAY
Boulders
Old fish dump
Angeles Pt
TOWER
400 FT
Coville Cr
Elwha River
Discontinued Disposal Area
Depths from surveys of 1994-1995
Ediz Hook
EDIZ HOOK
Fl G (2) W 10s 50ft 18M
HORN (3) 30s
Fl Y 6s "B"
Fl Y 6s "A"
Fl Y 4s
Fl R 2.5s
Fl G 4s 4M "1"
(chart 18468)
PROHIB ANCH
110.229 (see note A)
PORT ANGELES
Fl Y 17ft Pmk
STACK
R TR
MAST (KNOP)
1450 kHz
CUP
William R. Fairchild
International Airport
PORT ANGELES
Pipeline Area
MICROSECONDS
LORAN LINEAR INTERPOLATOR
18433
SUBM
Charted



North

Printed at reduced scale. ~~SCALE 1:80,000~~

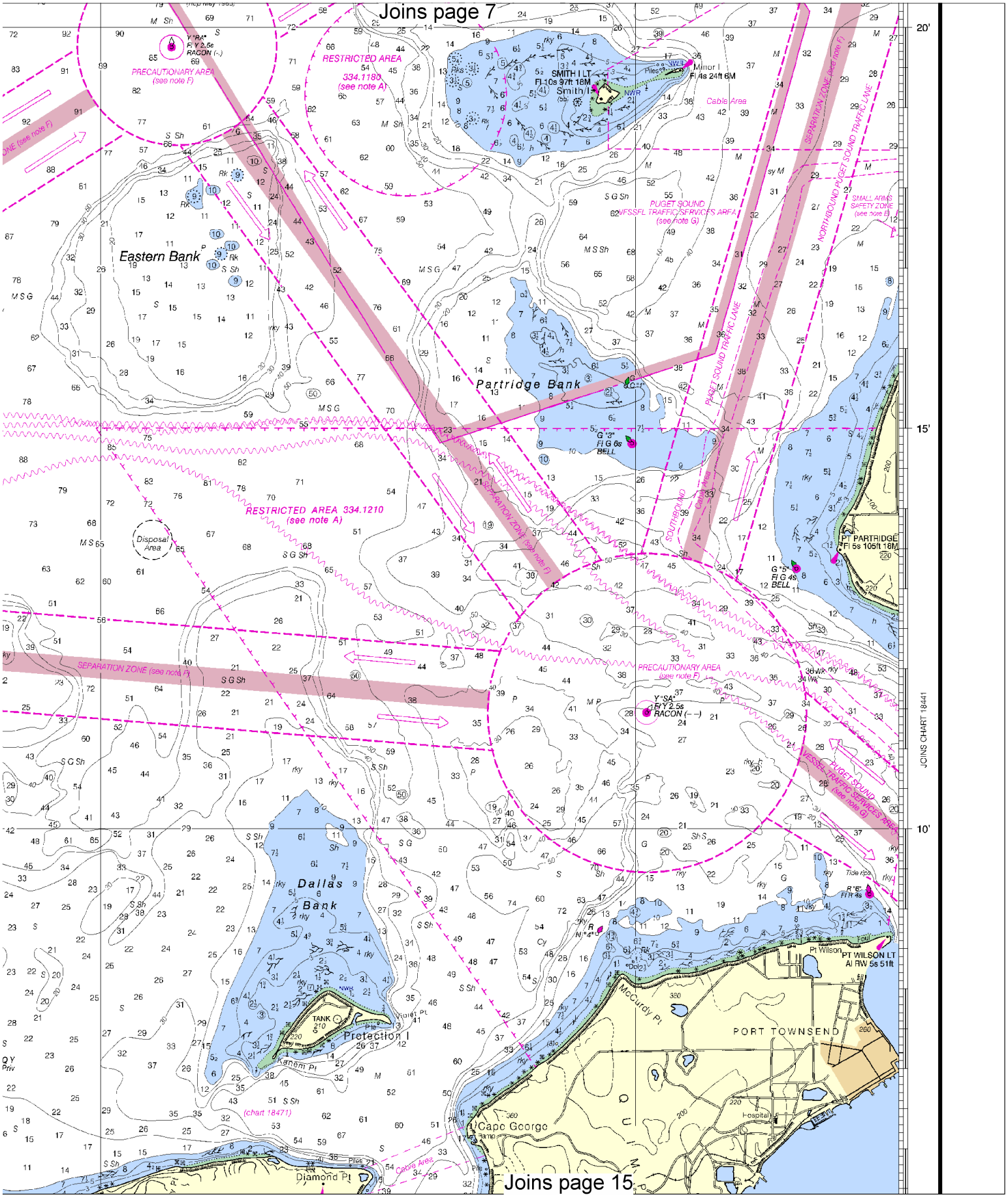
Nautical Miles

1 0 1 2 3 4 5 6 7

Yards

1000 0 2000 4000 6000 8000 10000

See Note on page 5.


Joins page 7
RESTRICTED AREA
334.1180
(see note A)
PRECAUTIONARY AREA
(see note F)
SMITH I LT
Fl.10s 97ft 18M
Smith I
Minor I
Fl 4s 24ft 6M
Cable Area
PUGET SOUND VESSEL TRAFFIC SERVICES AREA
(see note G)
SEPARATION ZONE
NORTHBOUND PUGET SOUND TRAFFIC LANE
SMALL ARMS SAFETY ZONE (see note E)
Eastern Bank
Partridge Bank
PHASE SOUTHBOUND
Caution Area
PT PARTRIDGE
Fl 5s 105ft 18M
G "5"
Fl G 4s
BELL
RESTRICTED AREA 334.1210
(see note A)
Disposal Area
SEPARATION ZONE (see note F)
PRECAUTIONARY AREA
(see note F)
Y "SA"
Fl Y 2.5s
RACON (– –)
VESSEL TRAFFIC SERVICES AREA
Dallas Bank
Protection I
TANK
210
Kanem Pt
(chart 18471)
Cape George
Diamond Pt
Cable Area
Pt Wilson
PT WILSON LT
Al RW 5s 51ft
McCurdy Pt
PORT TOWNSEND
Hospital
Joins page 15
20'
15'
10'
JOINS CHART 18441

Joins page 8

LORAN-C
GENERAL EXPLANATION

LORAN-C FREQUENCY 100kHz
PULSE REPETITION INTERVAL
5990 ..... 59,900 Microseconds
STATION TYPE DESIGNATORS: (Not individual station letter designators).
M ..... Master
W ..... Secondary
X ..... Secondary
Y ..... Secondary
Z ..... Secondary

EXAMPLE: 5990-Y

RATES ON THIS CHART

Loran-C correction tables published by the National Geospatial-Intelligence Agency or others should not be used with this chart. The lines of position shown have been adjusted based on survey data. Every effort has been made to meet the ¼ nautical mile accuracy criteria established by the U.S. Coast Guard. Mariners are cautioned not to rely solely on the lattices in inshore waters.

PUGET SOUND HARBOR SAFETY PLAN

The US Coast Guard and the Puget Sound Harbor Safety Committee have developed and adopted a Harbor Safety Plan that formally establishes a set of Standards of Care for Puget Sound and surrounding waters. These Standards of Care are intended to supplement existing regulations by documenting good marine practices for a variety of operations including tug escorts, pilotage, anchoring, lightering, and provides additional information on required charts, Aids to Navigation and Emergency Response. If your vessel does not already have a copy of the Puget Sound Harbor Safety Plan, log on to http://www.marineexchangesea.com or contact the Seattle Marine Exchange at (206) 443-3630.

3600 (Tree tops) Western and higher of two wooded peaks

Pyramid Mt (east corner) 3140

LAKE CRESCENT

Lake Sutherland

MAGNETIC

VAR 17°45'E (2009)

ANNUAL DECREASE 11'

Mt Storm King Rounded knob 4520

(Tree tops) 5130 Summit of Baldy Ridge western of double top

Aurora Pk 4770 Notchec top (east tip)

Sourdough Mt 4700 (east end of flat top)

6220 Peak, east end of ridge

5570

5500

1960

2350

2530

THE NATION'S CHARTMAKER SINCE 1807

UNITED STATES-WEST COAST

WASHINGTON

STRAIT OF JUAN DE FUCA

EASTERN PART

Mercator Projection
Scale 1:80,000 at Lat 48° 13'
North American Datum of 1983
(World Geodetic System 1984)

SOUNDINGS IN FATHOMS
AT MEAN LOWER LOW WATER IN U.S. TERRITORY
AT LOWEST NORMAL TIDES IN CANADIAN TERRITORY

Additional information can be obtained at nauticalcharts.noaa.gov.

HORIZ
The horizontal
is North American
for charting purpo
to the World Geod
Geographic posi
Amer can Datum
average of 0.665" s
to agree with this

48°
05'
55'
50'
45'
40'

38th Ed., May/ 08 ■ Corrected through NM May 17/08
Corrected through LNM May 13/08

18465

LORAN-C OVERPRINTED

CAUTION
This chart has been corrected from the Notice to Mariners (NM) published weekly by the National Geospatial-Intelligence Agency and the Local Notice to Mariners (LNM) issued periodically by each U.S. Coast Guard district to the dates shown in the lower left hand corner. Chart updates corrected from Notice to Mariners published after the dates shown in the lower left hand corner are available at nauticalcharts.noaa.gov.

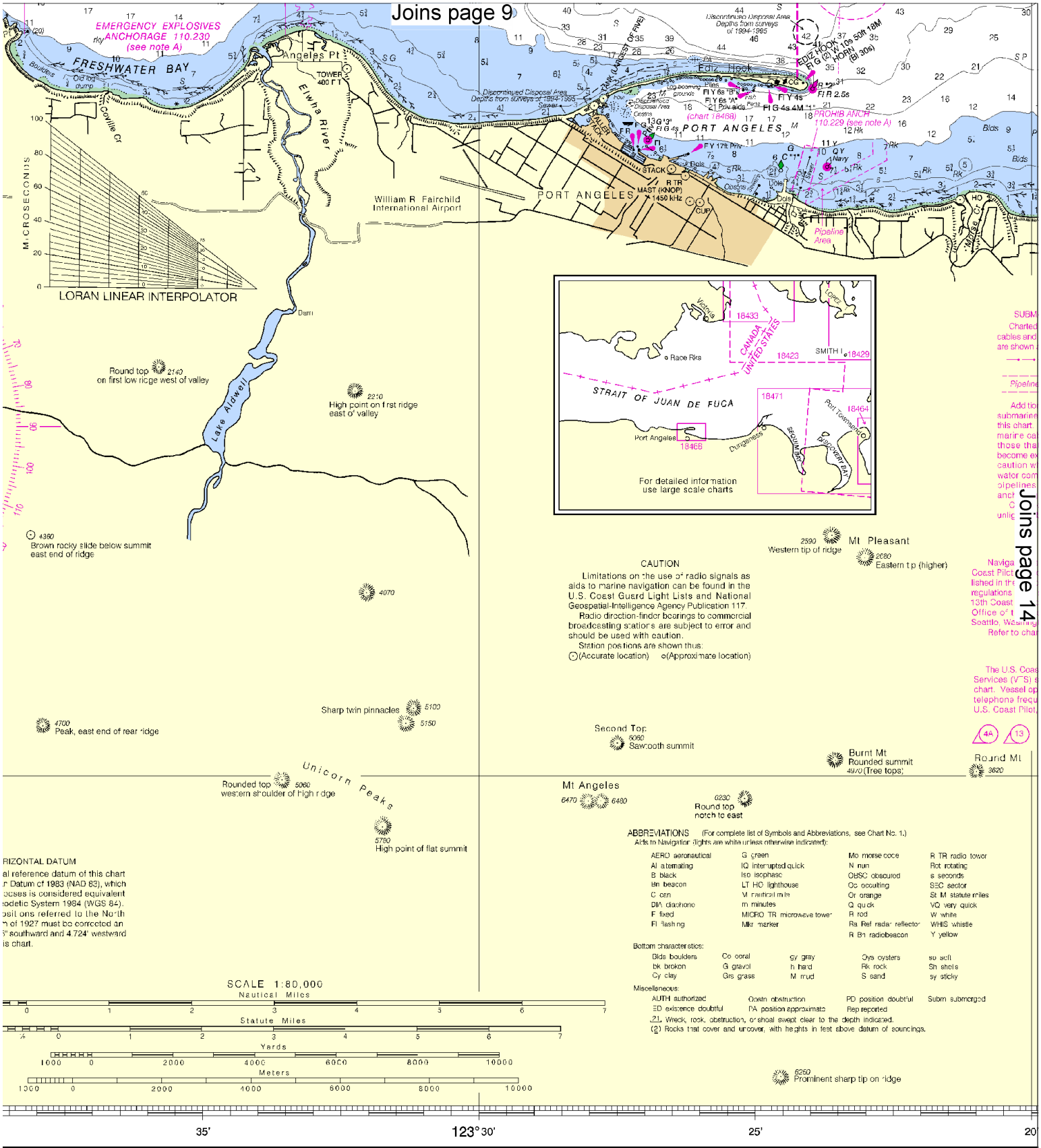
This nautical chart has been designed to promote safe navigation. The National Ocean Service encourages users to submit corrections, additions, or comments for improving this chart to the Chief, Marine Chart Division (N/CS2) National Ocean Service, NOAA, Silver Spring, Maryland 20910-3282.

North

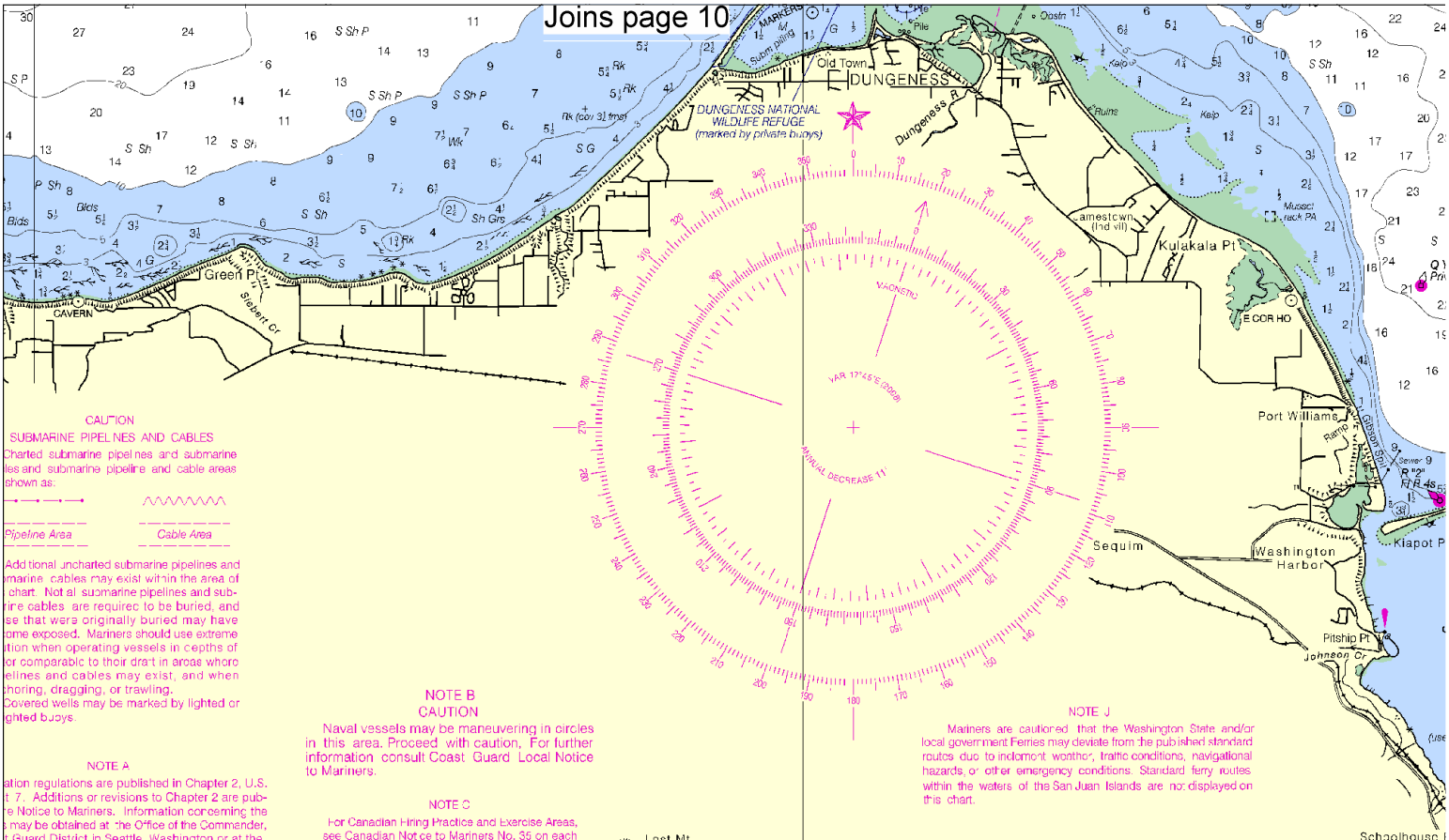
Printed at reduced scale. ~~SCALE 1:80,000~~ See Note on page 5.

Nautical Miles: 1 0 1 2 3 4 5 6 7

Yards: 1000 0 2000 4000 6000 8000 10000


Joins page 9
EMERGENCY EXPLOSIVES ANCHORAGE 110.230 (see note A)
FRESHWATER BAY
Angeles Pt
TOWER 400 FT
Elwha River
Coville Cr
Discontinued Disposal Area Depths from surveys of 1994-1995
Ediz Hook
EDIZ HOOK FIR 2.5s
PORT ANGELES
(chart 18468)
PROHIB ANCH 110.229 (see note A)
William R Fairchild International Airport
PORT ANGELES
STACK
MAST (KNOP) 1450 kHz
CUP
Pipeline Area
MICROSECONDS
LORAN LINEAR INTERPOLATOR
Dam
Lake Aldwell
Round top 2140 on first low ridge west of valley
2210 High point on first ridge east of valley
4360 Brown rocky slide below summit east end of ridge
4070
4700 Peak, east end of rear ridge
Sharp twin pinnacles 5100 5150
Unicorn Peaks
Rounded top 5060 western shoulder of high ridge
5700 High point of flat summit
Second Top 5060 Sawtooth summit
Mt Angeles 6470 6480
6230 Round top notch to east
Burnt Mt Rounded summit 4970 (Tree tops)
Round Mt 3620
2590 Western tip of ridge
Mt Pleasant 2080 Eastern tip (higher)
6250 Prominent sharp tip on ridge
Victoria
Race Rks
CANADA UNITED STATES
18433
18423
SMITH I 18429
STRAIT OF JUAN DE FUCA
18471
18464
Port Angeles
18466
Dungeness
Port Townsend
DISCOVERY BAY
For detailed information use large scale charts
CAUTION
Limitations on the use of radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light Lists and National Geospatial-Intelligence Agency Publication 117.
Radio direction-finder bearings to commercial broadcasting stations are subject to error and should be used with caution.
Station positions are shown thus:
⊙(Accurate location) o(Approximate location)
ABBREVIATIONS (For complete list of Symbols and Abbreviations, see Chart No. 1.)
Aids to Navigation (lights are white unless otherwise indicated):
AERO aeronautical
Al alternating
B black
Bn beacon
C can
DIA diaphone
F fixed
Fl flashing
G green
IQ interrupted quick
Iso isophase
LT HO lighthouse
M nautical mile
m minutes
MICRO TR microwave tower
Mkr marker
Mo morse code
N num
OBSC obscured
Oc occulting
Or orange
Q quick
R rod
Ra Ref radar reflector
R Bn radiobeacon
R TR radio tower
Rot rotating
s seconds
SEC sector
St M statute miles
VQ very quick
W white
WHIS whistle
Y yellow
Bottom characteristics:
Blds boulders
bk broken
Cy clay
Co coral
G gravel
Grs grass
gy gray
h hard
M mud
Oys oysters
Rk rock
S sand
so soft
Sh shells
sy sticky
Miscellaneous:
AUTH authorized
ED existence doubtful
Obstn obstruction
PA position approximate
PD position doubtful
Rep reported
Subm submerged
(21) Wreck, rock, obstruction, or shoal swept clear to the depth indicated.
(2) Rocks that cover and uncover, with heights in feet above datum of soundings.
RIZONTAL DATUM
al reference datum of this chart
r Datum of 1983 (NAD 83), which
ocess is considered equivalent
odetic System 1984 (WGS 84).
osit ons referred to the North
of 1927 must be corrected an
" southward and 4.724' westward
is chart.
SCALE 1:80,000
Nautical Miles
Statute Miles
Yards
Meters
35'
123°30'
25'
Joins page 14
SOUNDINGS IN FATHOMS
Pub ished at Washi
U.S. DEPARTMENT O
NATIONAL OCEANIC AND ATMOS
NATIONAL OCEAN
COAST SUR

Joins page 10



CAUTION

SUBMARINE PIPELINES AND CABLES

Charted submarine pipelines and submarine cables and submarine pipeline and cable areas are shown as:

Pipeline Area — Cable Area

Additional uncharted submarine pipelines and submarine cables may exist within the area of this chart. Not all submarine pipelines and submarine cables are required to be buried, and those that were originally buried may have become exposed. Mariners should use extreme caution when operating vessels in depths of water comparable to their draft in areas where pipelines and cables may exist, and when anchoring, dragging, or trawling. Covered wells may be marked by lighted or unlighted buoys.

NOTE A

Navigation regulations are published in Chapter 2, U.S. Coast Pilot 7. Additions or revisions to Chapter 2 are published in Notice to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, Thirteenth Coast Guard District in Seattle, Washington or at the Office of the District Engineer, Corps of Engineers in Seattle, Washington. Coast Pilot regulation section numbers.

NOTE B

CAUTION

Naval vessels may be maneuvering in circles in this area. Proceed with caution. For further information consult Coast Guard Local Notice to Mariners.

NOTE C

For Canadian Firing Practice and Exercise Areas, see Canadian Notice to Mariners No. 35 on each annual edition.

NOTE D

NAVAL OPERATING AREAS

Mariners should use caution as naval craft may be maneuvering within the areas. For further information, consult Local Notices to Mariners.

NOTE G

The Coast Guard operates a mandatory Vessel Traffic Service system in the U.S. waters covered by this chart. Operating procedures and designated radio-agencies are published in 33 CFR 161, the Coast Pilot, and/or the VTS User's Manual.

Vessel Traffic Services calling-in point with numbers; arrow indicates direction of vessel movement.

Lost Mt
2250 (Tree tops)

NOTE J

Mariners are cautioned that the Washington State and/or local government Ferries may deviate from the published standard routes due to inclement weather, traffic conditions, navigational hazards, or other emergency conditions. Standard ferry routes within the waters of the San Juan Islands are not displayed on this chart.

NOTE F

TRAFFIC SEPARATION SCHEME

One-way traffic lanes overprinted on this chart are RECOMMENDED for use by all vessels traveling between the points involved. They have been designated to aid in the prevention of collisions in the Strait of Juan de Fuca waters, but are not intended in any way to supersede or alter the applicable Rules of the Road. Separation zones are intended to separate inbound and outbound traffic and to be free of ship traffic. Separation Zones should not be used for crossing purposes. When crossing traffic lanes and separation zones, use extreme caution.

Precautionary Areas have been established where major lanes merge and cross the traffic separation scheme. It is recommended that vessels proceed with caution in these areas. Wherever practical, vessels entering or leaving the system should do so at these precautionary areas. For more information regarding Traffic Separation Scheme procedures and regulations, see 33 CFR 167 and/or Chapter 2 of the U.S. Coast Pilot.

For information governing the VESSEL TRAFFIC MANAGEMENT AND INFORMATION SYSTEM for the coastal waters of southern British Columbia, see National Geospatial-Intelligence Agency Publication 154, Sailing Directions (enroute) for British Columbia, and the Sailing Directions British Columbia Coast (South Portion) Volume I, published by the Canadian Hydrographic Service.

TIDAL INFORMATION

PLACE		Height referred to datum of soundings (MLLW)		
NAME	(LAT/LONG)	Mean Higher High Water	Mean High Water	Mean Low Water
		feet	feet	feet
Port Townsend	(48°07'N/122°46'W)	8.5	7.8	2.5
Port Angeles	(48°07'N/123°26'W)	7.1	6.5	1.9
Crescent Bay	(48°10'N/123°44'W)	6.7	6.1	2.0
* Victoria, Vancouver Island	(48°26'N/123°23'W)	8.6	8.0	4.6
* Scoke, Vancouver Island	(48°22'N/123°44'W)	9.4	8.4	4.8

Dashes (- - -) located in datum columns indicate unavailable datum values for a tide station. Real-time water levels, tide predictions, and tidal current predictions are available on the Internet from http://tidesandcurrents.noaa.gov.

(Jan 2008) *Note - In Canadian waters the chart datum is the average of the Lowest Normal Tides, approximately.

NOTE K

RECOMMENDED TWO-WAY ROUTE

The recommended two-way route south of the traffic separation scheme (TSS) formalizes traffic patterns where slower vessels such as tug and barge traffic and fishing vessels pass starboard to starboard. Slower moving traffic transiting eastbound should follow the route established south of the TSS and north of the recommended two-way route line depicted on the chart. Slower moving traffic transiting westbound should follow the route established south of the recommended two-way route line.

6020
High summit, rather isolated

5360
Eastern knob on long ridge

RADAR REFLECTORS

Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

NOAA WEATHER RADIO BROADCASTS

The NOAA Weather Radio stations listed below provide continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Neah Bay, WA	KIH-36	162.55 MHz
Puget Sound, WA	WWG-24	162.425 MHz
Seattle, WA	KHB-60	162.55 MHz

Joins page 13

20' 15' 10' 05'

Washington, D.C.
ENT OF COMMERCE
ATMOSPHERIC ADMINISTRATION
OCEAN SERVICE
T SURVEY

WARNING

The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot for details.

PRINT-ON-DEMAND CHARTS

NOAA and its partner, OceanGrafix, offer this chart updated weekly by NOAA for Notices to Mariners and critical corrections. Charts are printed when ordered using Print-on-Demand technology. New Editions are available 5-8 weeks before their release as traditional NOAA charts. Ask your chart agent about Print-on-Demand charts or contact NOAA at 1-800-584-4683, http://NauticalCharts.gov, help@NauticalCharts.gov, or OceanGrafix at 1-877-56CHART, http://OceanGrafix.com, or help@OceanGrafix.com.

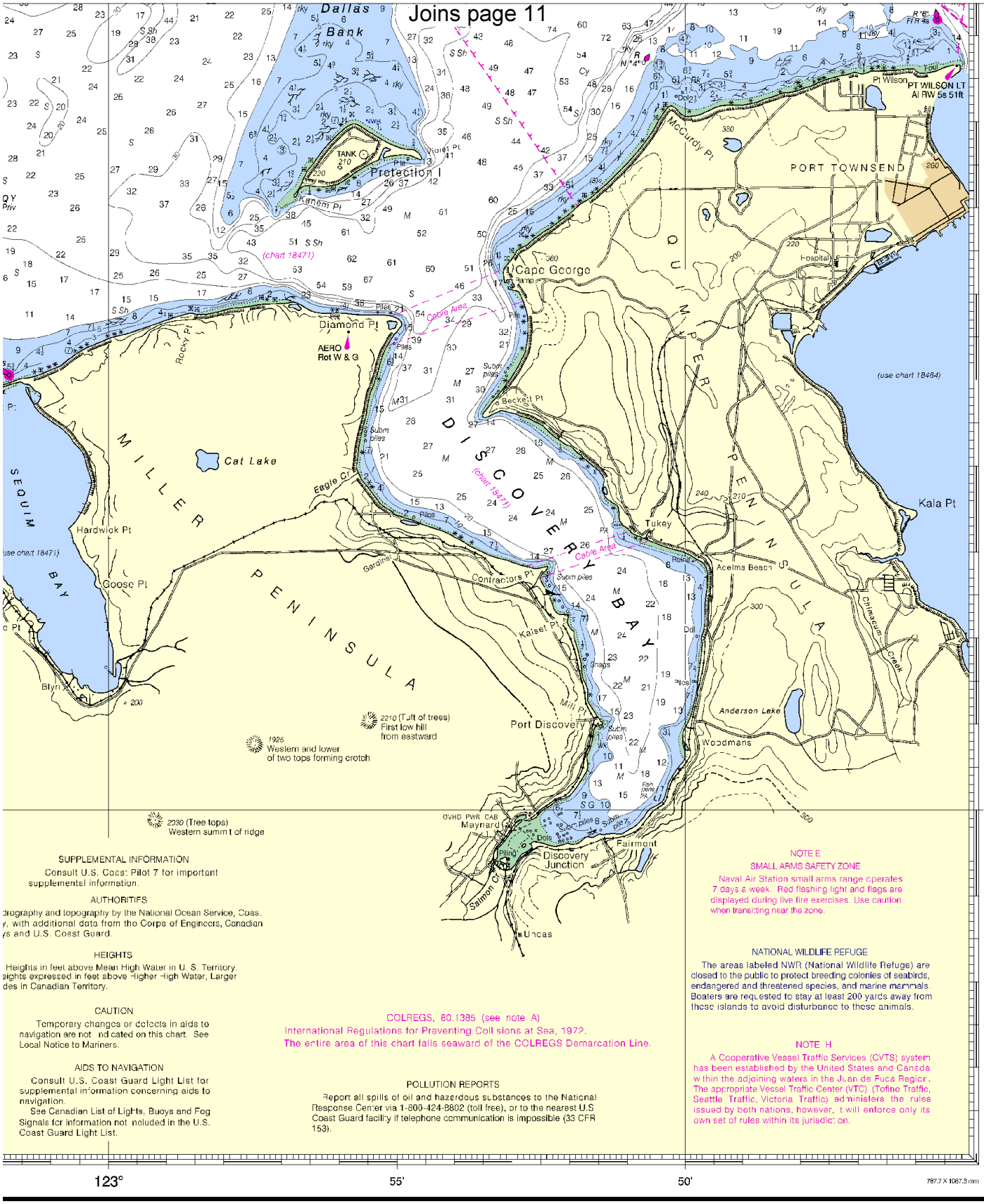
PATH:
PFF
MFTF

North

Printed at reduced scale. ~~SCALE 1:80,000~~ See Note on page 5.

Nautical Miles
1 0 1 2 3 4 5 6 7

Yards
1000 0 2000 4000 6000 8000 10000



SUPPLEMENTAL INFORMATION

Consult U.S. Coast Pilot 7 for important supplemental information.

AUTHORITIES

drography and topography by the National Ocean Service, Coas. , with additional data from the Corps of Engineers, Canadian ys and U.S. Coast Guard.

HEIGHTS

Heights in feet above Mean High Water in U. S. Territory. eights expressed in feet above Higher High Water, Larger des in Canadian Territory.

CAUTION

Temporary changes or defects in aids to navigation are not ind cated on this chart. See Local Notice to Mariners.

AIDS TO NAVIGATION

Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation.

See Canadian List of Lights, Buoys and Fog Signals for information not ncluded in the U.S. Coast Guard Light List.

COLREGS, 80.1385 (see note A)

International Regulations for Preventing Coll sions at Sea, 1972.

The entire area of this chart falls seaward of the COLREGS Demarcation Line.

POLLUTION REPORTS

Report all spills of oil and hazerdous substances to the National Response Center via 1-800-424-8802 (toll free), or to the nearest U.S Coast Guard facility if telephone communication is impossible (33 CFR 153).

NOTE E

SMALL ARMS SAFETY ZONE

Naval Air Station small arms range operates 7 days a week. Red flashing light and flags are displayed during live fire exercises. Use caution when transiting near the zone.

NATIONAL WILDLIFE REFUGE

The areas labeled NWR (National Wildlife Refuge) are closed to the public to protect breeding colonies of seabirds, endangered and threatened species, and marine mammals. Boaters are requested to stay at least 200 yards away from these islands to avoid disturbance to these animals.

NOTE H

A Cooperative Vessel Traffic Services (CVTS) system has been established by the United States and Canada w thin the adjoining waters in the Juan de Fuca Regicr. The appropriate Vessel Traffic Center (VTC) (Tofino Traffic, Seattle Traffic, Victoria Traffic) administers the rules issued by both nations, however, t will enforce only its own set of rules within its juriadic on.

787.7 X 1067.3 mm

FATHOMS 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17

FEET 6 12 18 24 30 36 42 48 54 60 66 72 78 84 90 96 102

METERS 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Strait of Juan de Fuca - Eastern Part

SOUNDINGS IN FATHOMS - SCALE 1:80,000

18465

LORAN-C OVERPRINTED

ED. NO. 38

NSN 7642014011491

NGA REFERENCE NO. 18ACO18465

15

EMERGENCY INFORMATION

VHF Marine Radio channels for use on the waterways:

Channel 6 – Inter-ship safety communications.
Channel 9 – Communications between boats and ship-to-coast.
Channel 13 – Navigation purposes at bridges, locks, and harbors.
Channel 16 – Emergency, distress and safety calls to Coast Guard and others, and to initiate calls to other vessels. Contact the other vessel, agree to another channel, and then switch.
Channel 22A – Calls between the Coast Guard and the public. Severe weather warnings, hazards to navigation and safety warnings are broadcast here.
Channels 68, 69, 71, 72 & 78A – Recreational boat channels.

Distress Call Procedures

1. Make sure radio is on.
2. Select Channel 16.
3. Press/Hold the transmit button.
4. Clearly say: "MAYDAY, MAYDAY, MAYDAY."
5. Also give: Vessel Name and/or Description; Position and/or Location; Nature of Emergency; Number of People on Board.
6. Release transmit button.
7. Wait for 10 seconds – If no response Repeat MAYDAY Call.

HAVE ALL PERSONS PUT ON LIFE JACKETS !!

Mobile Phones – Call 911 for water rescue.
Coast Guard Search & Rescue – 206-220-7001
Coast Guard Port Angeles – 360-457-4404
Commercial Vessel Assistance – 1-800-367-8222

NOAA Weather Radio – 162.400 MHz, 162.425 MHz, 162.450 MHz, 162.475 MHz, 162.500 MHz, 162.525 MHz, 162.550 MHz.

Getting and Giving Help – Signal other boaters using visual distress signals (flares, orange flag, lights, arm signals); whistles; horns; and on your VHF radio. You are required by law to help boaters in trouble. Respond to distress signals, but do not endanger yourself.

NOAA, The Nation's Chartmaker

NOAA CHARTING PUBLICATIONS

Official NOAA Nautical Charts – NOAA surveys and charts the national and territorial waters of the U.S, including the Great Lakes. We produce over 1,000 traditional nautical charts covering 3.4 million square nautical miles. Carriage of official NOAA charts is mandatory on the commercial ships that carry our commerce. They are used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters. NOAA charts are available from official chart agents listed at: www.NauticalCharts.NOAA.gov.

Official Print-on-Demand Nautical Charts – These full-scale NOAA charts are updated weekly by NOAA for all Notice to Mariner corrections. They have additional information added in the margin to supplement the chart. Print-on-Demand charts meet all federal chart carriage regulations for charts and updating. Produced under a public/private partnership between NOAA and OceanGrafix, LLC, suppliers of these premium charts are listed at www.OceanGrafix.com.

Official Electronic Navigational Charts (NOAA ENCs®) – ENCs are digital files of each chart's features and their attributes for use in computer-based navigation systems. ENCs comply with standards of the International Hydrographic Organization. ENCs and their updates are available for free from NOAA at www.NauticalCharts.NOAA.gov.

Official Raster Navigational Charts (NOAA RNCs™) – RNCs are geo-referenced digital pictures of NOAA's charts that are suitable for use in computer-based navigation systems. RNCs comply with standards of the International Hydrographic Organization. RNCs and their updates are available for free from NOAA at www.NauticalCharts.NOAA.gov.

Official BookletCharts™ – BookletCharts™ are reduced scale NOAA charts organized in page-sized pieces. The "Home Edition" can be downloaded from NOAA for free and printed. The Internet address is www.NauticalCharts.gov/bookletcharts.

Official PocketCharts™ – PocketCharts™ are for beginning recreational boaters to use for planning and locating, but not for real navigation. Measuring a convenient 13" by 19", they have a 1/3 scale chart on one side, and safety, boating, and educational information on the reverse. They can be purchased at retail outlets and on the Internet.

Official U.S. Coast Pilot® – The Coast Pilots are 9 text volumes containing information important to navigators such as channel descriptions, port facilities, anchorages, bridge and cable clearances, currents, prominent features, weather, dangers, and Federal Regulations. They supplement the charts and are available from NOAA chart agents or may be downloaded for free at www.NauticalCharts.NOAA.gov.

Official On-Line Chart Viewer – All NOAA nautical charts are viewable here on-line using any Internet browser. Each chart is up-to-date with the most recent Notices to Mariners. Use these on-line charts as a ready reference or planning tool. The Internet address is www.NauticalCharts.gov/viewer.

Official Nautical Chart Catalogs – Large format, regional catalogs are available for free from official chart agents. Page size, state catalogs are posted on the Internet and can be printed at home for free. Go to http://NauticalCharts.NOAA.gov/mcd/ccatalogs.htm.

Internet Sites: www.NauticalCharts.NOAA.gov, www.NOAA.gov, www.TidesandCurrents.NOAA.gov, www.NOS.NOAA.gov.